

REMARKS

Claims 1-10, 12-33, and 36-43 are currently pending in this application, with claims 6, 8, 12, 14-20, 23, and 24 having been withdrawn from consideration. None of the claims are amended.

OBJECTIONS TO DRAWINGS AND SPECIFICATION, AND REJECTION UNDER § 112

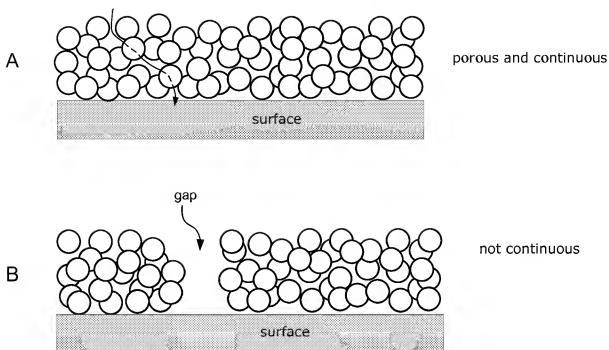
The Office Action objects to the drawings and the specification, and rejects claim 25 as being non-compliant with the definiteness requirement of § 112, second paragraph. Because these objections and the § 112 rejection are related to the Examiner's question of how a porous layer can also be continuous, they are addressed together in this section.

Claim 1 recites "a first surface of the implant body covered with a continuous filter layer, wherein the filter layer continuously covers a catalyst that promotes the decomposition of hydrogen peroxide, and wherein the filter layer has pores of a size in the range of 2 – 50 nm."

The Examiner asks how a layer can be both porous and continuous. If a layer is porous, wouldn't it mean that the layer is necessarily discontinuous? No. To take a simple example, a common kitchen sponge would be considered porous, but it would also be considered a continuous bulk article. In a similar way, a filter layer of the present invention can be both porous and continuous. This is illustrated in figures A and B below.

Figure A shows a coating layer on a surface. This coating layer is porous, as demonstrated by the arrow showing at least one passageway through which fluids or other materials could pass through the coating layer. But nevertheless, this coating layer is also continuous over the surface because there are no complete, full thickness interruptions in the coating layer.

Referring to figure B below, like the coating layer in figure A, the coating layer here is also porous. But in contrast to the coating layer in figure A, the coating layer here is discontinuous because it has a gap extending through the full thickness of the coating layer, resulting in an interruption in the coating layer.



With respect to the § 112 rejection, claim 25 does not contradict claim 1 because the continuous relationship is between the filter layer and the catalyst, not necessarily between the filter layer and the surface of the medical device. In the implant of claim 1, whether or not the filter layer covers over the entire surface depends on whether the catalyst covers the entire surface. If the catalyst does not cover the entire surface, then the filter layer does not necessarily cover the entire surface. But nevertheless, the filter layer will still continuously cover the catalyst, as required by claim 1. Thus, because the filter layer does not necessarily cover the entire surface of the medical device, claim 25 does not contradict claim 1.

For at least these reasons, Applicants respectfully request withdrawal of the objections to the drawings and specification, and the § 112 rejection.

REJECTIONS UNDER § 103

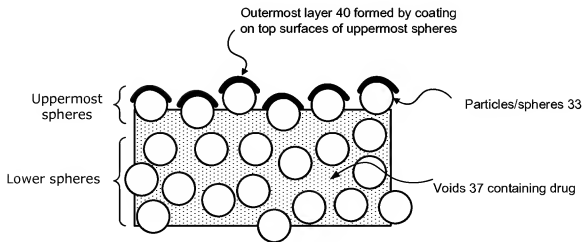
The Office Action rejects claim 1 and various claims that depend therefrom under § 103(a) as being unpatentable over Alt '438 (US 2004/0039438; Boston Scientific Scimed) in view of Narhi (US 7,527,804) and Hehrlein (EP 1319416); and for claims 21, 22, and 28, further in view of Smalley (US 2002/0085968). The Office Action also rejects claims 31-33 and 39

under § 103(a) as being unpatentable over Trozera (US 6,475,233) in view of Alt '438, Narhi, and Hehrlein. Applicants respectfully request reconsideration of these rejections.

Independent claims 1 and 31 recite a “continuous filter layer, wherein the filter layer continuously covers a catalyst that promotes the decomposition of hydrogen peroxide.” The Office Action concedes that Alt '438 is silent with regard to a continuous filter layer. However, the Office Action contends that Hehrlein teaches the use of a continuous ceramic filter layer, and suggests that this continuous ceramic filter layer could be used in place of the outermost layer 40 of Alt '438.

Applicants respectfully submit that this suggested modification is improper because it would render the Alt '438 coating inoperative for its intended purpose. MPEP 2143.01(V) instructs that if the “proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.”¹

Referring to the illustration that was provided in Applicants' prior response (reproduced below), Alt '438 teaches that the outermost layer 40 should “*merely cover the more exposed surfaces of particles 33*” and more specifically, “*primarily the top surfaces of the uppermost spheres of intermediate layer 32.*” (Alt '438, at ¶ [0038]; emphasis added). This non-continuous coverage of the particles in the outermost layer 40 results in gaps in outermost layer 40.



¹ Citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

The gaps in outermost layer 40 serve a role in the release of drug from the Alt '438 coating. As shown above, the Alt '438 coating has voids 37 between particles 33 that contain drugs that are intended for release. (Alt '438, e.g., ¶¶ [0036], [0039], and [0040]). Thus, the gaps in outermost layer 40 are needed to allow for the release of the drugs from the voids 37. If the outermost layer 40 were to be replaced with a continuous ceramic coating, the drugs would be trapped within voids 37 instead of being released as intended. Thus, replacing the outermost layer 40 in Alt '438 with the continuous ceramic coating of Hehrlein would render the Alt '438 coating inoperative for its intended purpose, i.e., the release of drugs from the coating.

Neither Narhi, Trozera, nor Smalley cures these deficiencies of Alt '438, nor supplies any motivation for providing outermost layer 40 as a continuous coating. For at least these reasons, Applicants respectfully submit that claims 1 and 31, and the claims that depend therefrom, are non-obvious in view of Alt '438 in view of Narhi, Trozera, and/or Smalley. Accordingly, withdrawal of the rejections is respectfully requested.

CONCLUSION

Applicants respectfully submit that the present application is in condition for allowance. The Examiner is invited to contact Applicants' representative to discuss any issue that would expedite allowance of this application.

The Commissioner is authorized to charge all required fees, fees under § 1.17, or all required extension of time fees, or to credit any overpayment to Deposit Account No. 11-0600 (Kenyon & Kenyon LLP).

Respectfully submitted,

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